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EXAMINER

CHANG, VICTOR S

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HEINRICH BOLLMANN,
KLAUS GIESEN,
RUEDIGER KRECH, and
ERHARD REICH

Appeal 2009-009475
Application 09/456,371
Technology Center 1700

Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and
CATHERINE Q. TIMM, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 19, 20, 22, 23, and 30. We have jurisdiction under 35 U.S.C. § 6.

Appellants claim a motor vehicle composite damping element received in, for example, a shock-absorber comprising a rigid thermoplastic polyurethane molding and a flexible microcellular polyurethane elastomer layer chemically bonded to at least one surface of the molding (claim 19).

Representative claims 19 and 23 read as follows:

19. A motor vehicle composite damping element received in a transverse link, a longitudinal link, a triangular link, a rear-axle subframe, a stabilizer, a spring-strut support, or a shock-absorber of a motor vehicle, said composite damping element comprising:

i) a rigid thermoplastic polyurethane molding having a thickness of from 2 to 10 mm, and

ii) a flexible microcellular polyurethane elastomer layer chemically bonded to and in direct contact with at least one surface of said rigid thermoplastic polyurethane molding such that said microcellular polyurethane elastomer layer dampens and absorbs vibrations of the transverse link, the longitudinal link, the triangular link, the rear-axle subframe, the stabilizer, the spring-strut support, or the shock-absorber while supported by said rigid thermoplastic polyurethane molding.

23. The composite element of Claim 19 wherein said elastomer layer is bonded to an outer surface of said molding.

The Examiner relies upon the following references as evidence of obviousness:

Renzo (as translated)	FR 2 559 862	Aug. 23, 1985
Zeitler	5,288,549	Feb. 22, 1994

As background, the Examiner has separated the rejections advanced in this appeal in accordance with the Examiner's first and second interpretations of the appealed claims (Ans. 3-9). Certain of these separated rejections involve the same claims and the same statutory grounds of rejection. However, we do not perceive the Examiner's first and second claim interpretations as being meaningfully different. In any event, the propriety of claim interpretations is based on whether the claims have been given their broadest reasonable interpretation consistent with the Specification. *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under these circumstances, we will consider the Examiner's rejections without separating them in accordance with the Examiner's first and second claim interpretations. Correspondingly, we will collapse the Examiner's repeated rejections of the same claims under the same statutory grounds into respective single rejections of the involved claims. As a result, the rejections set forth below represent all of the claim rejections expressed by the Examiner in the Answer.

The Examiner rejects claim 23 under the second paragraph of 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter Appellants regard as their invention. According to the Examiner, "[i]t is unclear what constitutes the scope of the term 'outer surface'" (Ans. 5, 9).

We fully agree with Appellants that the scope of the claim 23 phrase "outer surface" would be reasonably understood by one with ordinary skill in this art upon reading Appellants' Specification. (App. Br. 21). The Examiner's reasoning for this rejection is based on the allegation that "the original specification lacks any disclosure of a workable embodiment having a structural relationship which can be reasonably interpreted as a support for the

claimed limitation" (Ans. 5, 9). However, even assuming this allegation is correct, the Examiner has not explained why the alleged lack of support renders claim 23 in violation of the second paragraph of § 112.

The Examiner also rejects claim 23 under the first paragraph of 35 U.S.C. § 112, for failing to comply with the written description requirement (Ans. 4-5, 8).² As explained by the Examiner, "in claim 23 the limitation 'elastomer layer is bonded to an outer surface of said molding' is new matter, because nowhere can a support for such a structural relationship be found in the original specification" (Ans. 8).

The test for compliance with the written description requirement is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject

² In this rejection of claim 23 (Ans. 4-5), the Examiner also states that "[t]he amended specification and drawings filed 11/17/2003 . . . are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement" (*id.* at. 4). The Examiner's "rejection" of Appellants' Specification and Drawings is without apparent authority and is inconsistent with the Manual of Patenting Examining Procedure (MPEP) § 2163.06 I (rev. 6, Sept. 2007). As explained in this section of the MPEP, if new subject matter is added to the disclosure of an application, the Examiner should object to the introduction of new matter under 35 U.S.C. § 132 or § 251 as appropriate. Therefore, we will consider the Examiner's "rejection" of Appellants' Specification and Drawings as an objection to the introduction of new matter. The objectionable new matter issue raised by the amended Specification and Drawings filed 11/17/2003 is distinct from the written description issue raised by the Examiner's § 112, first paragraph, rejection of claim 23. As a consequence, the objectionable new matter issue is subject to supervisory review by petition under 37 C.F.R. § 1.181 and will not be considered in this appeal. *See id.* at II.

matter as of the filing date. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (*en banc*).

We agree with Appellants that their application disclosure would reasonably convey to an artisan that they were in possession of the claim 23 subject matter wherein the elastomer layer is bonded to "an outer surface" specifically of the molding (App. Br. 11-15).

Although the Examiner believes the "outer surface" bonding of claim 23 lacks written description support, the Examiner acknowledges that the "inner surface" bonding of claim 22 satisfies the written description requirement (Ans. 10, last para.). Significantly, non-rejected independent claim 19, as well as original claim 1 and the original Specification disclosure generically encompass bonding at either the inner surface or the outer surface of the molding. The Examiner's determination that bonding to an outer surface specifically lacks written description support is undermined by the fact that the Examiner implicitly regards bonding to any surface generically as supported and explicitly regards bonding to an inner surface specifically as supported. Moreover, whether Appellants' claimed molding surface is an outer versus an inner surface depends on how the claimed damping element is received in the non-claimed environment of intended use (e.g., a shock absorber). Viewed from this perspective, the allegedly unsupported outer surface bonding of claim 23 is structurally indistinguishable from the concededly supported inner surface bonding of claim 22.

Under these circumstances, we perceive no rational basis for the Examiner's belief that the outer surface bonding limitation of claim 23 violates the written description requirement. Instead, the record evinces that Appellants' original disclosure would reasonably convey to those skilled in the

art that the inventors had possession of the claim 23 subject matter as of their application filing date.

We cannot sustain, therefore, the Examiner's § 112, first paragraph, rejection of claim 23 based on the proposition that the claim 23 limitation "wherein said elastomer layer is bonded to an outer surface of said molding" violates the written description requirement (Ans. 8).

The Examiner rejects all appealed claims under the first paragraph of 35 U.S.C. § 112, based on the proposition that the independent claim 19 terms "rigid" and "flexible" lack written description support (Ans. 5).

Appellants correctly point out that their claimed composite damping element, comprising a rigid thermoplastic polyurethane molding and a flexible microcellular polyurethane elastomer layer, is disclosed as a replacement for known rubber-metal composite elements (App. Br. 15-17). Appellants argue that their claim 19 limitation "flexible" microcellular polyurethane elastomer layer is descriptively supported by the Specification disclosure "[i]t is well known that microcellular polyurethane elastomers can be used as a flexible element replacing the rubber" (*id.* at ¶¶ bridging 16-17; Spec. 1).

Particularly in light of the above quoted disclosure on page 1 of the Specification, we are convinced that the original disclosure of Appellants' application would reasonably convey to those skilled in the art that the inventors had possession on the application filing date of the claim 19 subject matter "a flexible microcellular polyurethane elastomer layer." The Examiner's opposing viewpoint is not supported by convincing evidence or rationale.

We reach a different determination for the claim 19 limitation "a rigid thermoplastic polyurethane molding." Appellants argue that the claim term

"rigid" would be considered applicable to the thermoplastic polyurethane molding since the term has an established definition and since the thermoplastic polyurethane molding is disclosed as a replacement for the rigid metal of known rubber-metal damping elements (App. Br. 16-17). We cannot agree.

The original Specification disclosure does not characterize the thermoplastic polyurethane molding as being rigid or as having the rigidity properties of the metal component of known metal-rubber damping elements. For all we know, based on this original disclosure, Appellants' thermoplastic polyurethane molding might actually be relatively flexible, rather than rigid, when compared to the metal component of known damping elements.

For the above stated reasons, we share the Examiner's determination that the claim 19 limitation "a rigid thermoplastic polyurethane molding" fails to comply with the written description requirement. It follows that we sustain the corresponding section 112, first paragraph, rejection of all appealed claims on the grounds that this claim 19 limitation lacks written description support.

The Examiner rejects claims 19, 20, and 22 under 35 U.S.C. § 103 (a) as being unpatentable over Renzo.

The Examiner finds that Renzo's Figures 5-6 damping element comprises a bellows 50 made of a material with a high modulus of elasticity, which would be relatively rigid, such as a thermoplastic polyurethane molding, and an internal core 51 made of a cellular elastomer, preferably polyurethane foam, which would be relatively flexible (Ans. 6-7). The Examiner acknowledges that the bellows wall of Renzo is described as having a small thickness rather than the 2-10 mm thickness required by claim 19 but

concludes that it would have been obvious for an artisan to optimize the wall thickness so as to be within a 2-10 mm range (*id.*).

Appellants argue that the thermoplastic polyurethane bellows of Renzo is flexible rather than rigid as required by the appealed claims (Reply Br. 7-9). This argument is unpersuasive.

While the joint between the folds of Renzo's bellows is bendable so that the bellows is collapsible (*cf.*, Figs. 5 and 6), this joint bendability does not evince that the folds of Renzo's bellows are flexible rather than rigid as Appellants seem to believe. On the other hand, the Examiner's finding that the bellows of Renzo is made of a material having a high modulus of elasticity evinces that the bellows material is rigid. Significantly, this finding by the Examiner has not been contested by Appellants with any reasonable specificity. Moreover, based on Renzo's disclosure of Figs. 5-6, it is reasonable to characterize the thermoplastic polyurethane bellows 50 as being rigid at least relative to microcellular polyurethane elastomer 51.

Appellants also contest the Examiner's conclusion that it would have been obvious to provide Renzo's bellows with a wall thickness of 2-10 mm as required by claim 19. According to Appellants, "[i]f the bellow 50 included a rigid thermoplastic polyurethane molding *between 2 and 10 mm*, then the bellow 50 would not be compressible and would not be able to absorb shock as required by Renzo" (Reply Br. 8). However, Appellants have provided no evidence in support of their assertion that a thermoplastic polyurethane bellows of Renzo would not be compressible if provided with a thickness of, for example, 2 mm. As a consequence, the argument under consideration constitutes an unsupported assertion without persuasive merit.

Finally, the Examiner rejects claim 30 under 35 U.S.C. § 103(a) as being unpatentable over Renzo in view of Zeitler.

The Examiner concedes that Renzo's thermoplastic polyurethane bellows is not disclosed as being formed from components in a ratio of isocyanate groups to isocyanate reactive groups of greater than 1.06:1 as required by claim 30 (Ans. 8). The Examiner finds that Zeitler discloses a composite comprising a thermoplastic polyurethane made from components having a ratio of isocyanate groups to isocyanates reactive groups of 0.85:1 to 1.1:1 (*id.*). The Examiner concludes that it would have been obvious for an artisan to make the thermoplastic polyurethane bellows of Renzo from components having a workable ratio of isocyanate groups to isocyanate reactive groups such as the 1.1:1 ratio disclosed by Zeitler (*id.*).

Appellants argue that "[i]t would not be obvious to combine a base layer of an interior dashboard [i.e., as taught by Zeitler] with an element in a jounce bumper as disclosed in Renzo" (Reply Br. 10). This argument is unpersuasive because it is based on an improper test for obviousness.

Contrary to Appellants' belief, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference but rather what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 624 F.2d 413, 425 (CCPA 1981).

In addition, Appellants argue that "Zeitler et al. teaches away from the subject invention of having an excess of isocyanate reactive groups and bonding the microcellular polyurethane elastomer layer in direct contact therewith" (Reply Br. 11). Contrary to this argument, rejected claim 30 requires an excess of isocyanate groups rather than an excess of the isocyanate

reactive groups referred to by Appellants. In any event, Zeitler's ratio range encompasses an excess for either of these groups including a 1.1:1 ratio of excess isocyanate groups which satisfies the "greater than 1.06:1" limitation of claim 30.

Accordingly, we sustain the Examiner's § 103 rejection of claim 30 as being unpatentable over Renzo in view of Zeitler.

In summary, we have not sustained any of the individual rejections of claim 23 under the first or second paragraphs of 35 U.S.C. § 112. However, we have sustained the § 112, first paragraph, rejection of all appealed claims as well as the § 103 rejections of claim 19, 20, and 22 over Renzo and of claim 30 over Renzo in view of Zeitler.

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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